

Municipal Water Conservation Plan For the City of Hays March 27, 2014

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MUNICIPAL WATER CONSERVATION PLAN

For the City Of Hays

March 27, 2014

INTRODUCTION

The City of Hays has long practiced a very effective Water Conservation Plan initially developed and filed in 1992. The implementation of this plan resulted in Hays becoming a leader for efficient water use in the State of Kansas. The City of Hays depends on alluvial aquifers that are recharged by area rainfall. The goals of this revised plan are to modernize our citizens' conservation education, to implement best management practices during periods of regular rainfall, to enact steps to ensure availability of adequate water during a prolonged drought.

LONG-TERM WATER USE EFFICIENCY

Water Use Conservation Goals

The City of Hays used 99 gallons per person per day (GPCD) in 2011. This GPCD figure included:

- Water sold to residential/commercial customers;
- Water distributed for free public services (parks, cemeteries, swimming pools etc.); and
- Water lost by leaks in the water distribution system.

The GPCD figure does not include municipally supplied water for industries that use over 200,000 gallons per year. According to Figure 1, shown in the 2011 Kansas Municipal Water Use Publication, our City is located in Region 5. From this publication it was determined that our City GPCD water use was 99, which was 34 percent below the regional average of 149 GPCD among cities in Region 5 during 2010. **The City goal is to use less than 95 GPCD** which is far less than a reasonable 143 GPCD 5 year regional average. Our City intends to be the leader in municipal conservation in Kansas by carrying out the specific actions in the following plan.

Water Use History

YEAR	GPCD	REG. AVG.	% DIFF.	% UA
2007	96	149	-36%	9
2008	92	142	-35%	11
2009	85	139	-39%	7
2010	91	137	-34%	7
2011	99	149	-34%	11
AVG.	93	143	-35%	9

The City of Hays Long-Term Water Use Efficiency Goals are:

- 1) To create a community that has a strong water ethic by teaching new conservation habits.
- 2) Reduce the amount of water lost through leaks by intensifying leak detection and repair efforts.
- 3) Achieve less than 10 percent unaccounted for water each year.
- 4) Use less than 95 GPCD each year.
- 5) Staff a Conservation Specialist dedicated to water conservation improvement.
- 6) The new norm: A water-conscious home, both inside and outside.

Water Conservation Practices

This subsection of the plan summarizes the current education, management and regulation efforts that relate to the long-term conservation of water in the City. Specific practices and targets that will be undertaken to conserve water are listed.

Education

The City has pursued the education of the general public through the implementation of water conservation programs within our community. These programs have been extended to all ages and citizen groups. This education process has included but not been limited to the following:

Education Conservation Practices	Target
Provide monthly detailed customer billing with water cost and usage history in cubic feet and gallons.	Implemented
Provide information on water conserving landscape practices through publications, local news media, seminars, or other appropriate means, to be updated by March 15.	Implemented
Distribute pamphlet on how to save water with description of conservation rebate programs to new customers and existing customers upon request.	Implemented
Provide free water saver kit with instructions to new customers, and existing customers upon request.	Implemented
Provide annual CCR report which includes a conservation message each May.	Implemented
Discuss conservation topics at the regularly scheduled monthly press briefings for local newspaper, radio, and internet companies.	Implemented
Provide information about the history of our water situation on www.Haysusa.com , to be updated March 15 or before.	Implemented
Provide water conservation hints and links on www.Haysusa.com , to be updated by March 15.	Implemented
Provide support to the Wellhead Protection Committee efforts on local water supply and water conservation, to be updated by March	Implemented

Management

The water rates for residential and business consumers, and the effective dates of such rates, shall be determined by the City Commission by resolution. The City's residential and business customers are metered individually. Water customers are billed monthly at a progressive tier rate for their usage in measurements of hundred cubic feet.

The City of Hays requires water meters on all supply wells. These meters are read continuously via SCADA and a daily pump report is printed. A monthly pump log is checked for discrepancies.

Water meters are required on all residential, commercial, and City properties. City properties such as administrative offices, parks and sports fields are provided with free water, but usage is reviewed by City staff. Customers may request a meter accuracy check and the meter will be repaired if outside AWWA standards.

Water leaks from the City public water distribution system are repaired when citizens report significant leaks from the water mains or are located by City personnel. Water pressure is monitored and low pressure causes an audible alarm immediately answered by 24 hour operator at the Water Plant.

Water meters are read monthly in the City of Hays.

A minimum fee based on the meter size is charged. The first 100 cubic feet of water is include in the minimum fee. All usage after the first 100 cubic feet is billed in the following manner:

Residential water usage as measured in January, February and March is averaged to determine an individual property's residential base usage. Monthly volume up to the residential base usage will be billed at the Base Tier Rate. The next 1,000 cubic feet (7500 gallons) used above the residential base usage will be billed at the Conservation Tier 1 Rate. Volumes that exceed residential base usage plus 1,000 cubic feet will be billed at the Conservation Tier 2 Rate. During a Water Warning or Emergency, a special increased Conservation Tier 2 rate is activated. Current water rates as of January 2014 are listed below.

Business water usage as measured in January, February and March is averaged to determine an individual property's business base usage. Monthly volume up to the business base usage will be billed at the Base Tier Rate. Volumes that exceed business base usage will be billed at the Conservation Tier 1 Rate. Tier 2 rates apply to business with potable irrigation systems; see details in Sec 65-224 below.

The City Commission establishes water rates by resolution. The current resolution has a clause that specifies a 3% increase each January, unless action is taken to halt the automatic increase. The automatic increase is to help offset budget shortfalls that may occur when conservation efforts decrease water sales revenue. During budget preparation each year, City staff estimates financial need and makes recommendation to the City Commission about whether the automatic increase should be allowed to happen or if other action is required.

Sec. 65-224. Rates Inside and Outside City

For current rates see online version at Hays Municode or:

http://library.municode.com/HTML/14230/level3/PTIICOOR_CH65UT_ARTIVWARACH.html#PTIICOOR_CH65UT_ARTIVWARACH_S65-224RAINOUCI

As of March 27, 2014

CHAPTER 65

UTILITIES

ARTICLE IV. WATER RATES AND CHARGES

Sec. 65-224. Rates inside and outside city.

Meter rates for the furnishing of water by the municipal water system of the city to consumers of such municipal water system are established as follows:

(1) *Monthly Usage Minimum Service Charge.*

a. Water usage as shown on the January, February and March billing is averaged to determine a water use average for both residential and business accounts. Usage that falls within this average will be billed at the Base Tier rate as established by resolution. Any usage that exceeds the water use average by up to 1,000 cubic feet will be billed at the Conservation Tier 1 rate as established by resolution, for both residential and business accounts. The water use average shall be a minimum of 500 cubic feet. Any customer without an established water use average will be allotted 500 cubic feet until a new water use average is established if more than 500 cubic feet. The water use average shall be recalculated annually after the March billing date.

b. All residential, business mixed use and multi-family meters with usage exceeding the water use average in excess of 1,000 cubic feet will be billed at the Conservation Tier 2 rate, as established by resolution.

c. All residential, business mixed use and multi-family meters with usage exceeding the water use average in excess of 1,000 cubic feet during times of official "Water Warning" or "Water Emergency" periods, as defined by the City of Hays Drought Response Plan, will be billed at the Conservation Tier 2 rate during Water Warning or Water Emergency, as established by resolution.

d. All irrigation meters with usage exceeding 1,000 cubic feet during times of official "Water Warning" or "Water Emergency" periods, as defined by the City of Hays Drought Response Plan, will be billed at the Conservation Tier 2 rate during Water Warning or Water Emergency then existing.

e. Any premises equipped or built to be occupied as a duplex, apartment house or by other multiple-dwelling units, or occupied in conjunction with a commercial building or other building and which receives water service from a single service shall pay the minimum water bill as for a domestic customer for each separate unit; provided that a mobile home park shall not be charged the minimum water bill for lots without a mobile home located thereon, as of the date for meter reading.

f. The minimum monthly service charge to be paid regardless of usage shall be as follows:

Meter Size (inches)	Inside City Limits (per month, in dollars)	Outside City Limits (per month, in dollars)
5/8	9.18	15.60
3/4	16.66	28.32
1	24.14	41.03
1½	39.10	66.47
2	76.50	130.05
3	113.90	193.63
4	188.70	320.79
6	375.70	638.69

(2) *Water Rates for Residential and Business Meters.* The water rates for residential and business meters, and the effective dates of such rates, shall be determined by the governing body and shall be specified in a resolution authorizing the same, and may be amended by resolution of the governing body.

The following rates are currently in effect at the time of passage of the ordinance from which this section is derived, and shall continue in full force and effect until any new or different rate goes into effect:

Cubic Feet of Water Usage	Inside City Limits (per 100 cubic feet, in dollars)	Outside City Limits (per 100 cubic feet, in dollars)
First 100	Included in minimum	Included in minimum
Base tier	1.85	3.15
Conservation tier 1	3.71	6.30
Conservation tier 2 (residential only)	7.42	12.61
Conservation tier 2—during Water Warning or Water Emergency (residential only)	10.30	17.51

(3) *Water Rates for Business Mixed Use and Multi-Family Meters.* The water rates for business mixed use and multi-family meters, and the effective dates of such rates, shall be determined by the governing body and shall be specified in a resolution authorizing the same, and may be amended by resolution of the governing body. The following rates are currently in effect at the time of passage of the ordinance from which this section is derived, and shall continue in full force and effect until any new or different rate goes into effect:

Cubic Feet of Water Usage	Inside City Limits (per 100 cubic feet, in dollars)	Outside City Limits (per 100 cubic feet, in dollars)
First 100	Included in minimum	Included in minimum
Base tier	1.85	3.15
Conservation tier 1	3.71	6.30
Conservation tier 2	5.39	12.61
Conservation tier 2 – during Water Warning or Water Emergency	8.27	17.51

(4) *Water Rates for Irrigation Meters.* The water rates for irrigation meters, and the effective dates of such rates, shall be determined by the governing body by resolution, and may be amended by resolution of the governing body. The following rates are currently in effect at the time of the passage of the ordinance from which this section is derived, and shall continue in full force and effect until any new or different rate goes into effect:

Cubic Feet of Water Usage	Inside City Limits (per 100 cubic feet, in dollars)	Outside City Limits (per 100 cubic feet, in dollars)
First 1,000 cubic feet	3.71	6.30
Conservation tier 2	7.42	12.61
Conservation tier 2 – during Water Warning or Water Emergency	10.30	17.51

END OF CODE Sec. 65-224. Rates Inside and Outside City

MANAGEMENT PRACTICES:

The City of Hays realizes the importance of obtaining accurate measurements of water use at each raw water intake and at customer meters, to help reduce the amount of unaccounted-for water. Hence, the City of Hays has chosen the following conservation practices and target dates for the management component of the Long-Term Water Use Efficiency Section of our Municipal Water Conservation Plan.

Management Conservation Practices	Target
1. Ensure all wells have meters installed and repair or replace malfunctioning meters within two weeks.	Implemented
2. Test well meters for accuracy at least once every three years. Create Work Order by March 15 for one third of wells.	Implemented
3. Ensure meters are installed at all residential service connections and at all other service connections whose annual water use may exceed 300,000 gallons, including separate meters for municipally operated irrigation systems which irrigate more than one acre of turf.	Implemented
4. Ensure meters at each individual service connection replaced or tested for accuracy on a regular basis, if they are one inch or less. Ensure meters between one inch and six inches are tested for accuracy at least once every five years and meters six inches and above are tested on at least an annual basis. Ensure meters are repaired if any test is not within AWWA Standards. Create Work Order by March 15.	Implemented.
5. Ensure all well meters and individual service connections are read at least monthly	Implemented
6. Implement a water management review which will result in a specific change in water management practices or implementation of leak detection and repair program or plan, whenever the amount of unsold water (amount of water provided free for public, used for treatment purposes, water loss, etc.) exceeds 20% of the total source water for a four month time period.	Implemented
7. Calculate water charges based on the amount of water used.	Implemented
8. Evaluate the existing water rate structure by March 15	Implemented
9. Develop and implement a program to incorporate water conserving landscape principles into future landscape development projects, including renovation of existing landscapes.	April 15, 2015
10. Develop and implement an irrigation management program for irrigated grounds.	April 15, 2015
11. Ensure water leaks from the City’s public water distribution system are repaired immediately (24/7/365) by on-call staff.	Implemented
12. Continue the use of wastewater effluent for irrigation purposes and explore ways to encourage the use of recycled wastewater for selected industrial and irrigation purposes.	Implemented
14. Continue to offer a \$100.00 rebate for installation of low water usage washing machines.	Implemented

15. Perform specific capacity tests annually on all wells. Treat any wells that are less than 85% of new well capacity to ensure energy and water efficiency.	Implemented
16. Continue to offer free and reduced rate 1.5 gpm shower heads at City Hall.	Implemented
17. Continue to offer rebates of \$50.00, \$100.00, and \$150.00 on 0.8, 1, or 1.3 gal flush toilet.	Implemented
18. Continue to cooperate with Mid-West Energy to identify opportunities for joint water and energy savings.	Implemented
20. Continue to employ Conservation Specialist dedicated to conservation of water resources.	Implemented
21. Continue to treat raw water from the Smoky Hill River Valley, Dakota Aquifer, and the Big Creek Alluvium at the water softening plant prior to distribution for consumption. All production wells and the inflow to the water softening plant are metered to detect supply leaks.	Implemented
22. Continue use of Supervisory Control and Data Acquisition (SCADA) system at all the Smoky, Dakota and City Wells (Big Creek Alluvium). The SCADA system assists in the accurate and real-time monitoring and control of the wells.	Implemented
23. Check water pressure and flow in the City water mains annually by the City Fire Department.	Implemented
24. Offer \$300.00 rebates on pint urinals.	Implemented

Regulation

The City of Hays enacted **Sec. 65-69. Water Allotment and Conservation Code.** in 2003 and revised it in 2013. These regulations require and enforce water conservation. This reinforces the culture of continuous conservation, even through periods of adequate rainfall. Numerous plumbing, landscaping, and water use permits are described and codified. Penalties are listed for violators. The Hays Police department actively enforces the code. The current provisions are included below and updated versions are available online.

Regulation Actions	Target
Seek annual delegation of authority by DWR to enforce conservation codes under the IGUCA. This allows the City to impose time limits for watering and water wasting fines.	Implemented
Require new development to follow xeriscape requirements	Implemented
Implement a Green Plumbing Code (more stringent code)	Implemented
Sec. 65-69. Water allotment and conservation. See below	Implemented

Sec. 65-69. Water allotment and conservation.

For latest version see online at Hays Municode or:

http://library.municode.com/HTML/14230/level4/PTIICOOR_CH65UT_ARTIIWASESY_DIV1GE.html#PTIICOOR_CH65UT_ARTIIWASESY_DIV1GE_S65-69WAALCO

(a) *Purpose.* In order to conserve the water supply of the city, to meet the needs and demands of the citizens of the city, and to eliminate waste in the use of such water, it shall be and is made unlawful for any person of any nature, including all persons and entities outside the City limits of the City of Hays, Kansas, with whom the city has any agreement to provide potable water, to use water contrary to and in violation of the following provisions. This section shall be known as and referred to as the "**Water Allotment and Conservation Ordinance**" of the city.

(b) *Definitions and Regulations.* The following words, terms and phrases, when used in this section, shall have the meanings ascribed to them in this subsection, except where the context clearly indicates a different meaning. The terms "water user," "customer" and "water service account" shall be synonymous:

Outdoor watering means the irrigation with water of lawns, shrubs, flowers, trees, gardens and other outdoor vegetation for personal, private, commercial, or governmental purposes; the filling or adding of water to public or private swimming pools; the washing down with water of buildings, machinery, vehicles and appliances for personal or private purposes, and other similar practices and acts.

Residential water user, in addition to meaning private residential water user, also means and includes residents of apartments, duplexes, and other like multiple resident facilities, but shall not include hospitals, nursing homes, residence halls, dormitories, or other similar uses.

Ultra low-flow means, in the case of faucets and showerheads, devices which substantially restrict the flow of water, while only providing sufficient water for the purpose intended; and in the case of water closets or toilets, means devices which restrict the use of water per flush to 1.6 gallons, or less.

(c) *Regulations.*

(1) The use of water for the washing down of sidewalks, walkways, driveways, parking lots, gas station aprons, and all other hard-surfaced areas, and other similar practices, shall be prohibited; provided that upon application, a special permit to allow such usage may be granted by the city clerk, if sufficient documentation and need, such as unreasonable hazard to public safety, can be shown.

(2) The escape or loss of water through breaks or leaks within the water user's plumbing or distribution system for any substantial period of time shall be prohibited, it being presumed that a period of eight hours after the water user discovers or should have discovered such leak or break is a substantial period of time.

(3) Outdoor watering, including, but not limited to, the irrigation of lawns, shrubs, flowers, trees, gardens and other outdoor vegetation, with potable water, shall be prohibited between the hours of 12:00 noon and 7:00 p.m., between June 1 and September 30, inclusive. Upon application and good cause shown, a special permit may be issued by the city to allow watering newly seeded lawns between said hours and said dates, with the terms and conditions of said permit to be established by the city, taking into account the type of grass and vegetation to be planted and watered so as to maximize the benefit of the use of potable water for said purpose, minimizing the waste of water and encouraging the water user to establish the grass and other vegetation at the optimum time and season. Said permit shall be valid for a maximum of ten days, shall restrict and regulate watering consistent with all ordinances and regulations, and shall be posted prominently at the site of the planting so that law enforcement and the public can easily view the permit. The city shall establish fees for said permits, in such a manner as to encourage the planting of low-water-use grass and vegetation and shall establish a system and program to purchase warm season, low-water-use seed and plants to give to applicants who are converting higher water-use grass and vegetation to lower water-use grass and vegetation. The city manager or his designee shall inform the city commission, as needed, of all current provisions of said permits, setting out all pertinent requirements and regulations, fees, financial incentives, and other information.

(4) No water user shall allow substantial amounts of water to escape or drain from private property onto public property, including, but not limited to, public sidewalks, rights-of-way, streets, alleys, and highways; provided that the term "substantial" shall mean an amount sufficient to cause a discernible flow of water reaching the

street, gutter or other drainage system. For purposes of this section, it shall be conclusively presumed that the resident of property from which water escapes or drains knows of such escape or draining. However, the escape of water from private property due to washing of vehicles shall not be construed as substantial; provided, the user of the water has not allowed water to flow from a hose or open tap when not directly being used to wash down the vehicle.

(d) *Penalties.* Any person accused of violating the provisions of subsection (c) of this section shall be notified in writing that such accusation has been made and the accused party may request a hearing before the city clerk, or any representative appointed by the city clerk, and may present evidence in defense of such accusation. If a request for a hearing is not served on the city clerk within three days following the service of the written accusation on the accused party or if the city clerk finds that the allegations of such accusation are true, the following penalties shall be imposed:

(1) Upon a first violation, the accused party shall be issued a formal written warning.

(2) Upon a second violation, water service shall be terminated on the property involved and a resumption of services fee in the sum of \$50.00 shall be paid before water service shall be resumed.

(3) Upon a third violation, water service shall be terminated on the property involved and a resumption of services fee in the sum of \$200.00 shall be paid before water service is resumed.

(4) Upon a fourth violation and any subsequent violations, water service shall be terminated on the property involved and a resumption of services fee in the sum of \$250.00 shall be paid before water service is resumed.

These provisions are cumulative, and for purposes of determining the number of violations committed, the previous 24 months shall be considered. Any violations previous to the preceding 24 months shall not be considered as violations for the purpose of assessing penalties in this section.

(Code 2000, § 13.08.150; Ord. No. 3860, § 1, 4-25-2013)

Sec. 65-70. Escape or draining of water from private property prohibited; penalty. 

(a) It is unlawful for any person to allow substantial amounts of water to escape and/or drain from private property onto public property, including, but not limited to, public sidewalks, rights-of-way, streets, alleys, and highways; provided that the term "substantial" shall mean an amount sufficient to cause a discernible flow of water reaching the street, gutter, or other drainage system.

(b) For purposes of this section, it shall be presumed that the resident of the private property from which water escapes or drains knows of such escape or draining.

(c) Any person accused of a violation of this section shall be charged in the municipal court of the city and shall, upon conviction of such violation, for the first conviction, not be fined but shall receive a warning as to the effect of subsequent convictions, for a second conviction, not less than \$0.00 nor more than \$25.00, and for a third or subsequent conviction, not less than \$25.00 nor more than \$50.00. (d)

The penalties provided for in subsection (c) of this section shall be in addition to any penalties provided for in [Section 65-69](#)

(Code 2000, § 13.08.160)

Sec. 65-71. Requirements for water conservation devices. 

(a) *Definitions.* The following words, terms and phrases, when used in this section, shall have the meanings ascribed to them in this subsection, except where the context clearly indicates a different meaning:

Ultra low-flow showerhead means devices which restrict the flow of water to provide only sufficient water for the purpose intended, and no more, restricting the flow of water to a maximum of 2.4 gallons per minute, at 80 pounds psi.

Ultra low-flow toilet means devices which restrict the use of water per flush to 1.6 gallons or less.

(b) *Hotels and Motels Affected.* All motels and hotels in the city shall, within 30 days after the effective date of the ordinance from which this section is derived, cause to be installed and henceforth used ultra low-flow showerheads in all showers in such facilities.

(c) *Compliance Required for Building Permit Issuance.* From and after the effective date of the ordinance from which this section is derived, no building permit shall be issued for any new construction in the city, unless and until it is adequately shown to the building inspector for the city that such construction shall include ultra low-

flow showerheads, faucets, toilets, and similar appliances.

(d) *Violation.* Any person or entity who violates the terms of this section shall be disconnected from city water service or refused city water service until such time as the violation has ceased.

(Code 2000, § 13.08.170)

Sec. 65-72. Diversion of water from sources located on property owned by city.

(a) *Certain Diversions of Water Unlawful.* It is unlawful for any person to divert water, by means of a pump or otherwise, from locations on property owned by the city unless such person has first complied with the provisions of this section.

(b) *Permits Required.* Prior to diverting water from a location on property owned by the city, the applicant must obtain a permit from the city as hereafter set out. Nothing in this section shall permit such applicant to obtain water from the water supply of the municipal water system, nor shall the issuance of such a permit be issued in violation of any laws of the state, K.S.A. 82a-727 et seq.

(c) *Permit Fee.* A fee of \$250.00 shall be paid to the city clerk prior to a permit being issued providing access to the water supply at locations on property owned by the city. The fee may be waived or decreased if the proposed use of water is a public benefit. Such fees shall be credited to the water and sewer fund of the city.

(d) *Contents of Permit.* The permit issued by the city clerk shall contain the following information:

- (1) The date of termination of the permit;
- (2) A description of the location of the point of diversion;
- (3) A description sufficient to define the location of the place where the water is to be used.

Such description shall correspond with the descriptions shown in the approval of application for temporary permit obtained from the state.

(e) *Term of Permit.* A permit shall be issued for a term of 30 days from the date of its issue and shall be null and void upon its expiration unless renewed by making a new application and complying with the provisions of this section.

(f) *Penalty.* Any person violating any provision of this section shall, upon conviction of such violation, be punished by a fine of not less than \$100.00, nor more than \$500.00. Each day's violation of this section shall be deemed a separate offense.

(Code 2000, § 13.08.180)

END OF CODE Sec. 65-69. Water Allotment and Conservation.

DROUGHT RESPONSE PLAN

March 27, 2014

The City of Hays has a very effective water conservation program. This program has resulted in Hays becoming a leader in the State of Kansas for municipal water efficiency. The City depends primarily on alluvial aquifers for its water and these are subject to depletion during periods of drought. If Hays is going to continue as a viable city, it must be ready to react to these periods of drought.

The City of Hays addresses its short-term fresh water shortage problems through a series of stages based on conditions of supply and demand with accompanying triggers, goals, and actions. Each stage is more stringent in water use than the previous stage. Upon a finding by the City Commission that conditions of a drought or another trigger is causing a water supply shortage, it is empowered in Ordinance No. 3881 to declare, by resolution, that a Stage 1 Water Watch, Stage 2 Water Warning, or Stage 3 Water Emergency exists and that steps should be taken to inform the public and determine if voluntary water conservation, recommended restrictions or mandatory restrictions are practiced. Any such resolution is deemed to be in effect until the City Commission declared by resolution that it has ended. The resolutions declaring the existence and end of a water stage shall be effective upon their publication in the official city newspaper. The Hays City Manager is authorized by ordinance to implement the resolution using the appropriate conservation measures.

K.S.A. 82a-733(i) allows the City Commission to require private well owners in Hays to follow the regulations in Stage 2 Water Warning and Stage 3 Water Emergency. The request to the Chief Engineer for this authority is made when entering a Stage Two Water Warning.

Article 7: Appropriation Of Water For Beneficial Use

K.S.A. 82a-733: Conservation plans and practices. (i) The chief engineer may delegate to any city which has conservation plans meeting state guidelines the authority to require domestic water users within such city to adopt and implement conservation plans and practices so that such city can require compliance from private domestic well owners within the city limits.

A Watch, Warning, or Emergency Stage may be called before or after reaching the respective listed triggers. The City Commission will consider other environmental and physical factor including but not limited to: short or long term weather forecasts, time of year, drought forecast, the trend line of the level of the aquifers, the availability of Cedar Bluff Water, and the contamination of a system component. Further consideration is given to the physical conditions of the wells, pumps, supply lines, distribution system, and the Water Softening Plant.

Any irrigation or other uses of treated effluent from the Waste Water Treatment Plant are not regulated by this document.

STAGE 1: WATER WATCH

Triggers Stage 1

This stage may be triggered by any one (1) of the following conditions:

- 1) The inability to maintain the City's underground storage reservoirs at or above 85 percent capacity for a 48 hour period.
- 2) Big Creek Aquifer's Static Water levels in 3 or more regular City Supply Wells have fallen to water WATCH levels as defined in the City of Hays Water Supply Operating Plan.
- 3) Smoky Well Field's Static Water Level in the designated well(s) has fallen to water WATCH levels as defined in the City of Hays Water Supply Operating Plan.
- 4) Daily water usage is in excess of 3.5 million gallons per day (mgd) for three (3) consecutive days.

Goals Stage 1

The City's goal during this stage is to have consumption voluntarily reduced through increased public awareness of existing water conditions.

Education Actions Stage 1

- 1) Regular news releases on water levels, water supply outlook, and ideas for conservation.
- 2) Provide an in-depth summary of conditions of water supply to the City Commission.
- 3) Increase water conservation education efforts city-wide.

Management Actions Stage 1

- 1) Test the Specific capacity of any wells not tested in the previous 12 months. Treat any wells that are less than 85% of new well capacity.
- 2) All City departments will curtail non-essential water use.
- 3) The City will reduce water usage on all parks and ball fields that utilize potable water by 30%
- 4) The City will monitor its use of water and will minimize activities such as hydrant flushing and street cleaning.
- 5) Wells will be pumped according to the corresponding Water Source Utilization Plan within the City of Hays Water Supply Operating Plan
- 6) If not already enacted, the City will request the Division of Water Resources to implement an afternoon watering prohibition within the intensive groundwater use control area (IGUCA) around the City of Hays.

Regulation Actions Stage 1

- 1) The public will be asked to curtail outdoor water use and to make efficient use of indoor water, i.e. wash full loads, take short showers, don't let faucets run, etc.

STAGE 2: WATER WARNING

Triggers Stage 2

This stage may be triggered by any one (1) of the following conditions:

- 1) The inability to maintain the City's underground storage reservoirs at or above 70 percent capacity for a 48 hour period.
- 2) Big Creek Aquifer's Static Water Levels in three or more regular City Supply Wells have fallen to water WARNING levels as defined in the City of Hays Water Supply Operating Plan.
- 3) Smoky Well Field's Static Water Level in the designated well(s) has fallen to water WARNING level as defined in the City of Hays Water Supply Operating Plan.
- 4) Daily water usage is in excess of 3.5 mgd for seven consecutive days, with wellfield conditions depleting.
- 5) If the well fields are in a Watch Stage on February 15, and static levels are not increasing, and drought is forecasted to continue, the City Commission may declare a Warning Stage.

Goals Stage 2

The goals of this stage are to reduce peak demands by 30 percent and to reduce overall weekly consumption by 20 percent.

Education Actions Stage 2

- 1) The City will make presentations at public forums on the conditions of the water supply and the promotion of water conservation.
- 2) The City will make frequent news releases to the local media describing present conditions and indicating the water supply outlook.
- 3) The City may place inserts in each customer's water bill outlining tips on conserving water indoors and outdoors.
- 4) Water conservation articles will be provided to the local media.

Management Actions Stage 2

- 1) The City water supply will be reviewed daily.
- 2) Wells will be optimized by pumping according to the corresponding Water Source Utilization Plan within the City of Hays Water Supply Operating Plan.
- 3) Standby wells will be prepared for contingency operation.
- 4) The City will curtail its water usage, including watering of City grounds and washing of vehicles.
- 5) The City will reduce water usage on all parks and ball fields that utilize potable water. The goal will be to water only enough to keep the roots of the grass alive.
- 6) Plantings, flower beds, and other vegetation in medians, rights of way, parks, and adjacent to City buildings will no longer be watered with potable water.
- 7) Notify KWO that conditions have been met for release from Cedar Bluff.
- 8) The City will contact DWR for permission to require private wells to comply with the City's drought response regulations as authorized under K.S.A. 82a-733(i)

Regulation Actions Stage 2

These regulation actions apply to City of Hays' residents (including private domestic well users, if authority is delegated by the Chief Engineer, Kansas Division of Water Resources, under K.S.A. 82a-733(i)).

- 1) Enact the Sec. 65 "Conservation Tier 2 –Water Warning or Water Emergency" water rate.
- 2) City will no longer approve connection of new lawn meters or upsizing of meters for irrigation purposes.
- 3) City will no longer authorize new connections to the potable water system for properties located outside the city limits.
- 4) City will stop issuing permits for newly seeded/sodded lawns, benefit car washes, washing houses, washing of hard surfaces.
- 5) Outdoor Water Use, including lawn watering and car washing will be restricted to before 10:00 a.m. and after 9:00 p.m. as authorized under the Water Drought/Emergency Ordinance.

STAGE 3: WATER EMERGENCY

Triggers Stage 3

This stage may be triggered by any one (1) of the following conditions:

- 1) The inability to maintain the City's underground storage reservoirs at or above 50 percent capacity for a 48 hour period.
- 2) Big Creek Aquifer's Static Water Levels in three or more regular City Supply Wells have fallen to water EMERGENCY levels as defined in the City of Hays Water Supply Operating Plan.
- 3) Smoky Well Field's Static Water Level in the designated well(s) has fallen to water EMERGENCY levels as defined in the City of Hays Water Supply Operating Plan.
- 4) Daily water usage is in excess of 3.5 mgd for 14 consecutive days, with wellfield conditions depleting.

Goals Stage 3

The goal is to limit all consumption to the base flow requirements equal to or less than normal winter usage.

Education Actions

- 1) The City will make daily news releases to the local media describing present conditions and indicating the water supply outlook for the next day.
- 2) If necessary, the City will hold public meetings to discuss the emergency, the status of the City's supply and further action, which needs to be taken.
- 3) Continue to increase efforts to educate the general public (schools, civic groups, etc.) and hold public forums to discuss the water situation and conservation.

Management Actions Stage 3

- 1) The City water supplies will be reviewed daily.
- 2) All municipal swimming pools and water features will be closed.
- 3) Standby wells will be considered for contingency operation.
- 4) If release triggers are met, the City will request a release from Cedar Bluff Reservoir, from the Joint Use Pool.
- 5) The City may seek additional emergency supplies from other users, the state or the federal government.
- 6) The City will contact DWR for permission to require private wells to comply with the City's drought response regulations as authorized under K.S.A. 82a-733(i)

Regulation Actions Stage 3

These regulation actions apply to City of Hays residents (including private domestic well users, if authority is delegated by the Chief Engineer, Kansas Division of Water Resources, under K.S.A. 82a-733(i)).

- 1) Outdoor Watering will be banned.
- 2) Continue Sec. 65 “Conservation Tier 2 –Water Warning or Water Emergency” water rate.
- 3) The City will no longer approve the installation or connection of new water meters to the potable distribution system without City Manager approval.
- 4) The filling of swimming pools will be prohibited.
- 5) Irrigation meters will be locked by City staff.
- 6) Upon the declaration of a water supply emergency the City Commissioners shall have the power to adopt additional emergency water rates to conserve water supplies.

PLAN REVISION, MONITORING AND EVALUATION

The City of Hays will monitor and review monthly totals for water production, consumptive use by water billing category, unsold water used by the City, and water that is unaccounted for. These totals will be compared to those from previous months and usage from previous years.

The City of Hays’ Municipal Water Conservation Plan will be reviewed on an annual basis and on a more frequent basis during drought or other water shortage conditions. If the water conservation gallons per capita per day (gpcd) goal(s) for the previous year are not met, then the City will review the data collected from the previous year in relationship to the status and effectiveness of the conservation practices that are outlined in the plan and will provide a status report to the Division of Water Resources (or whatever state agency is responsible for approving and monitoring our plan), which will also include any additional water conservation practices that may need to be taken in order for the City to achieve and maintain its water use conservation gpcd goal(s).